

Differential Substance Abuse Treatment (DSAT) Model

Developed for the

**State of Maine
Department of Behavioral and Developmental Services
Office of Substance Abuse (OSA)**

And Implemented in the

State of Maine Department of Corrections (DOC)

June 1999

Prepared by:

Jamieson, Beals, Lalonde & Associates, Inc.

Under Contract with:

Johnson, Bassin & Shaw, Inc.

Prepared under the

**State Systems Technical Assistance Project
Center for Substance Abuse Treatment**

CSAT

*Center for Substance Abuse Treatment
SAMHSA*

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PREFACE

The association between substance abuse and crime is well known. This report presents a differential model for an assessment and treatment system for substance abusing offenders that is strongly rooted in the research literature on assessment and effective treatment. While it may seem to be putting the cart before the horse, in this short preface we aim to present the reader with some of the very strong evidence obtained by our project. We also show additional correctional evidence that speaks to the importance of comprehensive assessment and treatment systems such as the one you are about to explore. This is an “appetizer” that we hope will whet your appetite for the report that follows.

Research conducted by the Correctional Service of Canada (CSC) has clearly documented a strong, positive relationship between criminal risk and severity of substance use. The first graph (entitled Risk=Substance Use Over Criminal History) is based on research reported by Dr. John Weekes of CSC and shows this relationship clearly with increasing criminal risk being associated in an almost linear fashion with increasing severity of substance use. In other words, as substance abuse dependence rises, so does criminal behavior. The strength of this relationship is such that we have developed the Maine Differential Substance Abuse Treatment system using substance abuse severity as a proxy for criminal risk.

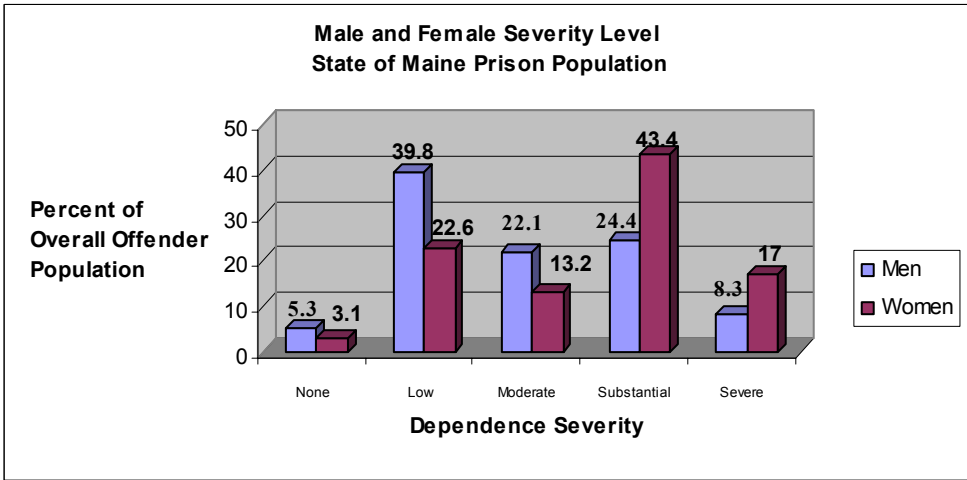
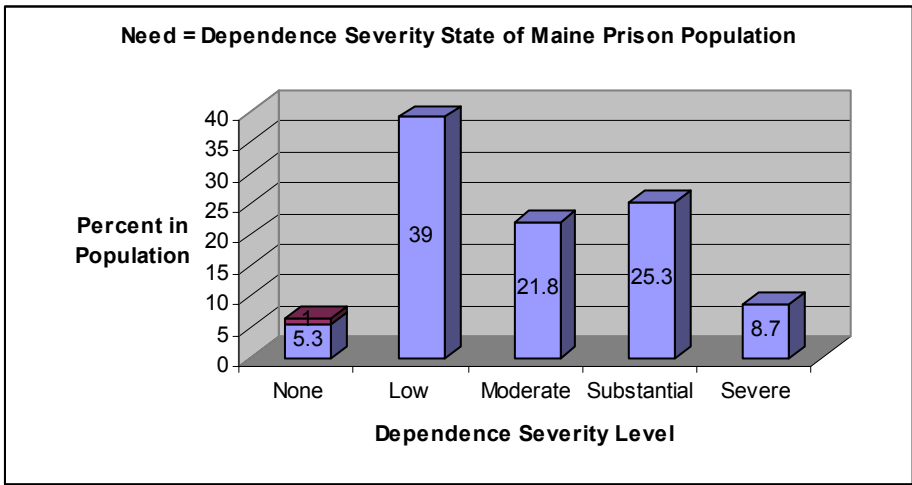
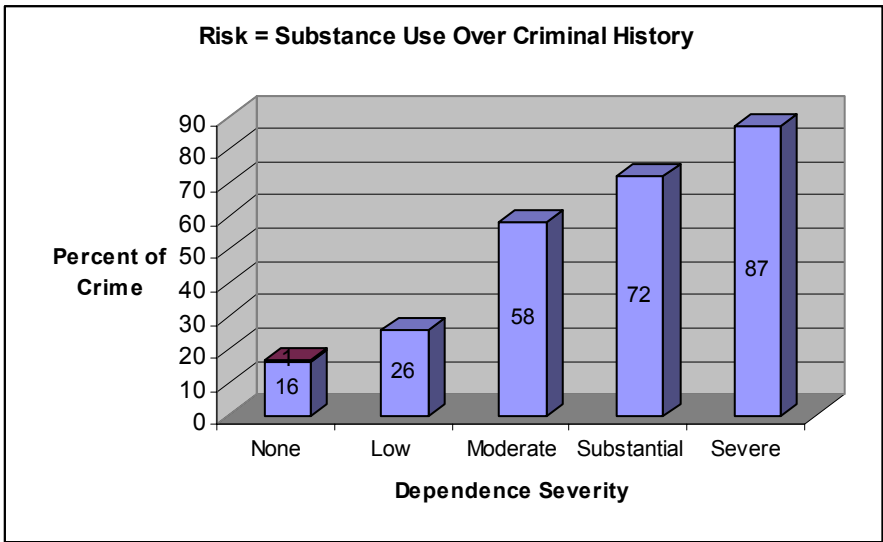
Data gathered during our initial validation of the severity of dependence classification algorithm also suggest that a simple, easily administered and interpreted screening battery can effectively classify offenders, both male and female, into Need levels based on Severity of Substance Dependence.

The second two graphs (entitled respectively, Need=Dependence Severity and Male and Female Severity Levels) presents the data from a survey of over 1100 inmates in the State of Maine Prison Population. Clearly, there is a wide range of need levels (i.e., dependence severity levels) among prisoners in the system. The Need=Dependence Severity graph shows that a substantial proportion of the male offender population (i.e., about 33%) fall into the two highest dependence categories (i.e., substantial and severe) suggesting a need for intensive treatment services. Although a much smaller percentage of the overall offender population, the Male and Female Severity Level graph shows that women experience more severe substance abuse dependency than men. Close to 60% of women fall into the substantial and severe dependence categories (compared to the 33% of male offenders in these categories).

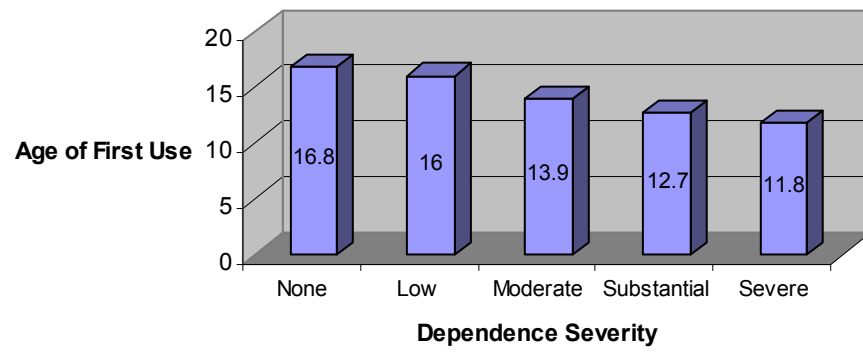
Finally, the validity of the classification algorithms developed for the State of Maine Department of Corrections is demonstrated by the final graph reporting Age of First Use by Dependence Severity Level. In this graph, it is clear that offender's in our sample who reported the most severe substance dependence also report earlier onset of substance use, and that this relationship is direct, with less severe dependence being associated with later age of first use.

These data reinforce the need for an assessment-driven treatment system for offenders that address the varying needs of offenders with different levels of substance dependence problems.

In this report that follows the Maine Differential Substance Abuse Treatment system is described, and the reader provided with greater insight into the thinking and research that went into its development.



**Average Age of First Use By Dependence Severity Level
State of Maine Prison Population**



Acknowledgements

We would like to thank Carl Mowatt, Manager, Maine Office of Substance Abuse and Joyce Harmon, Health Planner, Maine Department of Corrections for the central role they played toward the completion of the Differential Substance Abuse (DSAT) Model report. We appreciate the strong efforts displayed by all of the Maine DOC staff who did an excellent job in accurately screening the entire Maine inmate population over very challenging timelines. The investigation team (Greg Graves, M.A. and Dr. Frederick Rotgers) would also like to thank the members of our team who contributed to the program design, data programming and statistical analysis (Clarence Lockhead and Brook Hersey) and the literature review (Francoise Chantelope and Brook Hersey) component of the report. The investigation team appreciates the assistance of Dr. John Weekes, Manager, Substance Abuse Programs, National Headquarters, Correctional Service of Canada for his advice and support on the DSAT Model. The success of the DSAT Model rests on the spirit of cooperation and collaboration that has taken place to date and will take place in the future.

I. Introduction to the Differential Substance Abuse Treatment (DSAT) Model

A. Introduction to the DSAT Model

The Differential Substance Abuse Treatment (DSAT) Model was developed for the Maine Office of Substance Abuse (OSA) for implementation within the Maine Department of Corrections (DOC). OSA advanced the development of the DSAT Model to the Center for Substance Abuse Treatment (CSAT) who approved the project. The contract management duties of the DSAT Model were awarded to Johnson, Bassin, and Shaw, Inc.

The overall objective of introducing the DSAT Model is to target reductions in substance abuse and recidivism among the inmate population in the State of Maine. This is to be accomplished by developing and implementing a correctional treatment model that systematically and consistently assesses the need level of the inmate population and provides a corresponding treatment service that addresses criminal risk.

Figure 1 (see next page) presents a schematic illustration of the DSAT Model. It serves as the reference point for the current discussion. The term “differential” is used to illustrate the process of client-treatment matching whereby correctional staff assess the inmate’s level of criminal need in order to deliver a treatment plan that addresses criminal risk at the institutional and community level.

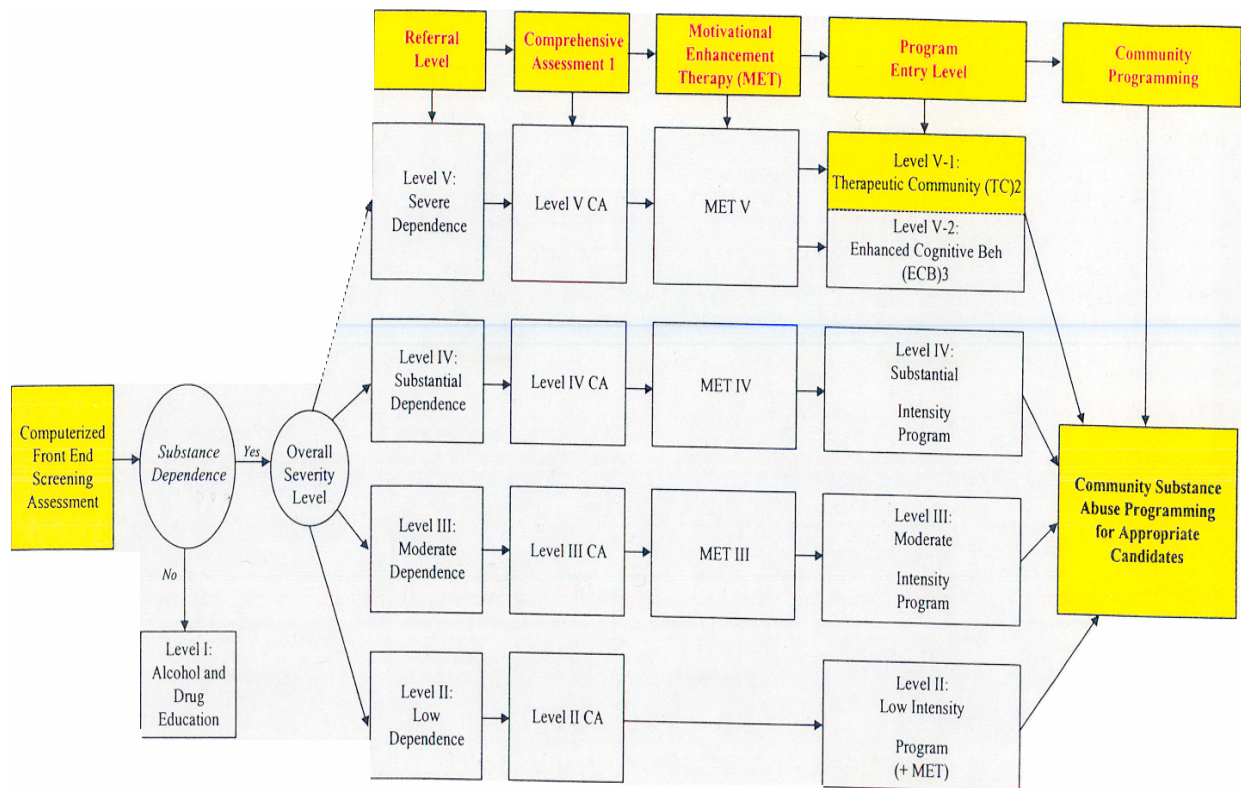
This report provides a detailed overview explaining how the DSAT Model can be developed and implemented within the Maine Department of Corrections. The current introduction highlights the key components of the DSAT Model.

B. Overview of the DSAT Model

1. Computerized Front End Screening Assessment

All inmates entering the Maine DOC will pass through a computerized “front end screening assessment” that classifies the inmates according to differential levels of need/risk. This assessment determines treatment placement. A computerized system is suggested for ease of administration and to facilitate the systematic collection of information for treatment and research purposes. The psychometric tools that are part of the front end screening assessment were selected on the basis of their scientific properties to produce valid and reliable information of the Maine inmate population. The front end assessment approach uses standardized data collection methods to ensure that systematic and consistent assessment results are obtained.

Figure 1: Differential Substance Abuse Treatment (DSAT) Model



- (1) Professional override can be used during the CA phase to send the inmate to a higher or lower level of programming, if required.
- (2) The Therapeutic Community (TC) is designed for severe drug users and severe drug-and-alcohol users combined.
- (3) The Enhanced Cognitive Behavioral (ECB) program is designed for severe alcohol users.

Developed for the State of Maine Office of Substance Abuse (OSA) and Implemented in the State of Maine Department of Corrections (DOC)

2. Referral Level

The Referral Level shown in Figure 1 illustrates how inmates progress from the initial screening assessment to a “face-to-face” comprehensive assessment. After the initial screening assessment, the inmate is referred to a designated comprehensive assessment for the final program referral determination. There are separate comprehensive assessments that match each level of substance abuse programming. This approach is used to ensure that each program’s selection criteria are met before a decision is made to recommend an inmate for program entry. The one exception to the assessment procedures occurs when inmates are screened as having “no problem.” Figure 1 reveals that inmates assessed as having “no problem” are immediately referred to a Level I program that consists of a brief awareness/education intervention.

The treatment provider conducts the comprehensive assessment to ensure that the screening results are accurate and to determine whether the inmate is an appropriate candidate for a particular level of treatment. The main purpose of the comprehensive assessment is to find out whether or not the inmate’s overall substance abuse profile matches a particular level of programming.¹ At the same time, the comprehensive assessment can be used to re-assign inmates to a higher or lower level of programming if new information is uncovered through a file review, face-to-face interview, and the treatment ratings. This approach allows for flexibility with the necessary “checks and balances” to ensure that the inmate is properly matched according to their criminal need/risk.

3. Motivational Enhancement Therapy

Motivational Enhancement Therapy (MET) is a brief intervention (usually ranging from one to six sessions) that is designed to treat individuals with addictive behaviors. There is strong research that supports MET as highly effective in increasing problem recognition and the probability of treatment entry, continuation, and compliance. This is particularly important when working with inmates who often have low level of motivation regarding treatment. The MET sessions are conducted in group and individual format. The intensity of the group sessions corresponds with the severity of the inmate’s substance abuse problem (i.e., more services are directed at higher risk clients). The approach is cost efficient given that the length of the group sessions range from one to six sessions. The individual MET sessions are delivered as an adjunct to the structured program levels II to V.

4. Continuum of Treatment: Institutional and Community Programming

The protocol used to refer inmates into treatment is designed to adhere to the operational requirements of each institution. The classification officers and treatment providers are trained to refer inmates into appropriate levels of treatment. At the same time, the tone of assessment and treatment referrals can include a level of negotiation with the inmate. For example, the cornerstone of the DSAT Model is tailoring assessment and treatment to the level of the individual. The inmates are given the opportunity to participate in a treatment intervention that directly matches their substance abuse history and patterns. This component of the DSAT Model allows the inmates to have input into the type of treatment they receive, from the point of view of

¹ The comprehensive assessment moves beyond the screening rating system to closely examine the inmate’s overall substance abuse profile (e.g., level of motivation, criminal offence history, substance use history, prior treatment history, psychological functioning, social functioning, and cognitive and behavioral deficits).

determining if the intervention will benefit them and considering the consequences of not participating in the services.

The inmate enters one of the five levels of institutional programming based on a match between criminal need and risk (i.e., through the screening and assessment procedures). The Therapeutic Community is classified as a Level V intervention and is now operation at the Maine Correctional Center. In addition, cognitive-behavioral interventions are offered at each of the five levels of institutional interventions. The cognitive-behavioral interventions are developed according to a conceptual model of criminal behavior and are based on program components that have research evidence of treatment effectiveness.

The DSAT Model operates according to a “continuum of treatment” that extends from institutional to community treatment. The inmate first comes into contact with the DSAT Model at intake when screening and comprehensive assessments are conducted to determine the nature and severity of the substance abuse problem.² At this stage, correctional staff employ the procedures of client-treatment matching to ensure that the inmate’s need level is matched to appropriate level of differential treatment (ranging from levels I to V). In other words, inmates with low levels of need/risk are referred to lower intensity interventions (e.g., education) while inmates with high levels of need/risk are referred to higher intensity interventions. The treatment protocols include brief sessions that specifically target offender motivation as a method of increasing the overall level of inmate involvement in programming.

The community treatment phase of the DSAT Model has the dual objective of providing both transitional and treatment services that teach inmates how to cope with high-risk situations that are often experienced upon release from prison. The inmates are given the opportunity to fully learn and practice cognitive and behavioral coping skills that suit their individual needs. The focus is on relapse prevention and management as a basis for reducing the inmate’s risk of re-offending and resuming substance abusing behaviors.

² Section II contains a full description of how the screening and comprehensive assessments are conducted.

II. DSAT Screening and Comprehensive Assessment System

A. Computerized Screening Assessment System

A major focus of this project is to develop a specialized screening and comprehensive assessment system to enable the classification of Maine inmates into the differential levels of risk/need that will direct treatment placement. The system is one that can be readily programmed for computer administration and data entry, thus minimizing the need for manual data processing. The system is also designed to provide an initial level of risk/need assignment that can then be used by a treatment provider during the comprehensive assessment process to further clarify the inmate's level of risk/need and insure appropriate treatment placement.

The system consists of two components:

- A computerized screening assessment, to be administered at initial intake, that produces a level of risk/need score for each inmate.
- A comprehensive face-to-face assessment that is administered by a treatment provider that produces a final treatment level placement.

Each of these components will be discussed in more detail later.

The computerized screening is designed to provide information about several aspects of the inmate's substance use and motivation for treatment. The screening battery consists of six short questionnaires, all of which have been shown to have good reliability and validity in assessing substance abuse. The six questionnaires comprise two measures of substance dependence, one focused on alcohol, the other on drugs; two measures of substance-related life consequences, one focused on alcohol, the other on drugs; and two measures of motivation for change, one focused on alcohol, the other on drugs.

The data provided by the inmate in response to the screening instruments are then analyzed according to norms developed specifically for the Maine Department of Corrections. Next, the inmate is assigned to one of five levels of risk/need that determines the intensity of the treatment programming the offender will receive. The inmate's case is then passed on to a treatment provider responsible for intake into the five levels of treatment intervention for verification and further assessment.

B. Comprehensive Assessment

The comprehensive assessment is a face-to-face interview in which a clinician collects further data about the inmate's substance use history, assigns a diagnosis, and cross-checks information provided in the screening with objective information available in the prison records. One purpose of this process is to insure that treatment placements are as appropriate as possible by checking the accuracy of the treatment level assignment produced by the screening. The clinician can override the screening level assignment and move an inmate up or down in level intensity on the basis of the results of the comprehensive assessment.

A further goal of the comprehensive assessment is to begin the process of treatment engagement and motivation by using the data available to conduct a brief motivational interview with the inmate (Miller and Rollnick, 1993). This interview is designed to enhance treatment receptivity and readiness to change. The interview is tailored to the individual offender and specific to the treatment level to which the inmate will ultimately be assigned. This insures that offenders will be matched to the level of treatment intensity most appropriate for the severity of their substance use problems.

C. Offender-Treatment Matching

A critical function of this screening and assessment system is the matching of inmates to appropriate levels of treatment. Matching is important for several reasons:

- There is evidence that “over-treating,” i.e., providing a more intensive level of treatment intervention than is warranted by problem severity may produce poorer outcomes.
- Matching insures that resources are allocated appropriately and that expensive, intensive interventions are not utilized with inmates who could benefit from less expensive and less intensive interventions.

1. Cost-effectiveness

Treatment programs that differ in duration and intensity also carry different costs. The relative savings achieved by providing a treatment of the intensity that is appropriately matched to inmate need/risk can be substantial. Recent estimates by the National Treatment Improvement Evaluation Study (NTIES) of the National Institute on Drug Abuse (NIDA) illustrate the relative costs associated with delivery of treatments of various intensities. These estimates, which are based on surveys of treatment programs in the community, are provided for illustration purposes only. Specific costs of providing these interventions in a prison setting may vary. However, the relative cost factors will remain the same. According to the NTIES data, the relative costs associated with various treatment intensities and their corresponding treatment levels within the Maine DSAT system are:

- Regular Outpatient Treatment (Maine DSAT levels II and III)—\$1800 per individual per year.
- Intensive Outpatient Treatment (Maine DSAT levels IV and V, excluding the Therapeutic Community (TC) Intervention)—\$2500.00 per individual per year.
 - Long Term Residential (Maine DSAT Level V-TC)—\$6800.00 per individual per year.

These comparison figures strongly suggest that the implementation of a well-designed system that matches inmates to an appropriate treatment intensity level based on need/risk can result in substantial savings over a system in which inmates are not systematically assessed and assigned to treatments.

D. Screening Assessment Results

1. Overview on the Screening Assessment

In early 1999, the Maine Department of Corrections (DOC) conducted a system-wide screening assessment of the State inmate population.³ A systematic set of steps was followed to ensure that the assessment results were valid. The specific steps included:

- 1) Conducting detailed training sessions with DOC staff on how to administer the screening assessment package;
- 2) Staff monitoring of the data collection procedures, including the return of the completed screening assessment packages;
- 3) Inputting the screening assessment packages into a statistical database;
- 4) Cleaning the data to ensure the highest level of accuracy; and,
- 5) Analyzing the data to determine the need/risk levels of the State inmate population.

The system-wide screening assessment provides an overview of the existing inmate population that is outlined in this section of the report. Subsequent to the system-wide screening assessment, the Maine DOC adopted a policy of screening all inmates at intake in order to support ongoing assessment and referral procedures.

a. Nature of the Assessment Procedures

The purpose of a screening assessment is to determine the nature and extent of the inmate's substance abuse problem and to set the stage for further evaluation and placement in an appropriate level of treatment. The screening system allows for a systematic and consistent procedure to determine the exact nature of substance abuse problems among the inmate population. The screening measures classify inmates into one of five levels of substance abuse severity: **none, low, moderate, substantial, severe**.

The severity of an inmate's substance abuse is closely correlated with his/her future criminal behavior if the problem remains untreated. Overall, inmates with increasing levels of substance abuse need experience heightened rates of re-admission, both for new offenses and for technical violations of release conditions. The Maine treatment programs are divided into levels I, II, III, IV, and V, each providing a treatment program specific to the severity of the substance abuse problems of inmates at that level. These levels correspond to the substance abuse severity levels of None (Treatment Level I), Low (Level II) Moderate (Level III), Substantial (Level IV) and Severe (Level V).

b. Risk, Need, Responsivity

The screening procedures that were developed for the Maine Department of Corrections use a system of referral assignments that is based on the principle of risk, need, responsivity. The principle of "risk, need, responsivity" asserts that the most intensive (and expensive) treatment resources should be reserved for inmates with the highest levels of need/risk while less intensive

³ The entire screening assessment took place over a relatively brief timeframe, between January 26 and February 19, 1999. The number of invalid or missing cases applies to the individual tools that were used to calculate the overall severity levels (i.e., the SADD, SDS, DAST, and MAST). The total number of missing or invalid items was below 85 on all of the four measures. Refer to later headings in this section for more detailed discussion on the four tools.

services are provided for inmates at low need/risk.⁴ This system is recommended because inmates with the highest levels of assessed need/risk are responsible for a disproportionate number of re-admissions following release. The need principle assumes that “needs” are criminogenic inmate characteristics that, when influenced, are associated with changes in the chance of recidivism.

c. Screening Referrals

In accordance with the risk, need, responsivity principle, inmates are assigned to differential levels of programming depending on the results of the initial screening assessment. The first two levels are classified as **awareness** or **educational interventions** while the top three levels are considered **treatment**. The treatment programs specifically target changing the criminal and substance abusing behavior of the inmates.

The objective of screening is to match the inmate’s need level with a program level that addresses criminal risk. The following procedures are adopted for referring inmates into five levels of treatment that will be developed for the Maine DOC⁵:

⁴ Refer to Don Andrews, Jim Bonta and R. Hoge, “Classification for effective rehabilitation,” *Criminal Justice and Behaviour*, 17, 1990.

⁵ The department recently introduced a Therapeutic Community at Windom that corresponds with Level V.

Severity	Assigned Program Level
None	Level I (Awareness – brief intervention)
Low	Level II (Education – brief intervention)
Moderate	Level III (Treatment – moderate intensity)
Substantial	Level IV (Treatment – substantial intensity)
Severe	Level V (Treatment – highest intensity) ⁶

A straightforward system is devised so all inmates falling into the “none” range are referred into Level I programming, low to Level II, moderate to Level III, substantial to Level IV, and finally the most severe cases are referred into the most intensive level of services. There should be no deviation from the referral system of outlined in the chart above unless new information is uncovered later in the assessment process (i.e., after the inmate receives a comprehensive assessment).

d. Evidence Supporting Need/Risk

The direct relationship between the inmate’s need and criminal risk is highlighted in a well controlled research study that was recently completed for the Correctional Service of Canada.⁷ This study examined an inmate population at a medium security prison in Ontario, Canada (i.e., Bath institution). The correctional researchers found a direct relationship between substance abuse need and criminal risk. In fact, the results demonstrated that the rate of re-admission increased substantially according to the severity of the inmates’ substance abuse problem. For instance, inmates assessed as having no substance abuse problem were re-admitted into custody at the rate of 22% (one year following incarceration). Conversely, inmates assessed as severely dependent had a re-admission rate of 44%. This sample refers to inmates who were not involved in treatment prior to release.⁸ The relationship between the inmates’ need and risk levels is supported in several U.S. and Canadian research studies.⁹

⁶ Section III outlines the treatment approaches of Maine’s five levels of treatment.

⁷ See William Millson, John Weekes, and Lynn Lightfoot, *The Inmate Substance Abuse Pre-Release Program: Analysis of Intermediate and Post-Release Outcomes*, Correctional Service of Canada: Research Branch: Ottawa, 1995.

⁸ Refer to the Millson et al. report for a discussion on the drops in recidivism for inmates who successfully completed a moderate intensity substance abuse program. Ibid.

⁹ A few of the seminal need/risk studies include: Don Andrews, Jim Bonta, and R. Hoge, “Classification for effective rehabilitation,” *Criminal Justice Behavior*, 17, 1990; Don Andrews et al., “Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis,” *Criminology*, 28, 1990.

2. Screening Battery

The criteria used to select the Maine Screening Assessment Battery are based on several considerations. First, a total of four psychometric tools (i.e., questionnaires) were selected to calculate a measure on the inmate's overall level of substance abuse severity.¹⁰ The Michigan Alcohol Screening Test (MAST) and the Drug Abuse Screening Test (DAST) measure alcohol and drug consequences while the Short Alcohol Dependence Data (SADD) and the Severity of Dependence Scale (SDS) measure physical dependence to alcohol and drugs, respectively. These tools are used to measure alcohol and drug physical dependence and consequences in order to produce an overall rating on severity. Second, the four screening tools that are part of the Maine Screening Assessment Battery have all been widely administered across a diverse range of treatment populations, including inmates, over the past 10 to 20 years. Research demonstrates that these measures are valid and reliable.

3. Training DOC staff

Twelve correctional staff received a one-day training session on how to administer the Maine Screening Assessment Battery in a fair and objective fashion. The topics covered included an overview of the assessment tools, a review of the research findings, guidelines for administration, and the “hands on” administration of the screening battery to a group of inmates at Maine State Prison. The training ended with a group feedback session, which followed the practice screening exercise. All of the trainees had the opportunity to fully review written guidelines on how to administer the screening assessment battery, including direct observations on how to conduct the assessments.

4. State-Wide Screening Assessment

a. Scope of the Screening Assessment

The corrections staff administered the Maine Screening Assessment Battery, system wide, over a period of two weeks. The screening assessments were conducted at the following six institutions:

- 1) Maine Correctional Institution
- 2) Maine State Prison
- 3) Maine Correctional Center
- 4) Down East Correctional Facility
- 5) Bangor Correctional Facility
- 6) Charleston Correctional Center.

The screenings were completed on a voluntary basis. Nevertheless, the corrections staff collected assessment results on close to 70% of the inmate population. Overall, 1103 of the approximately 1600 inmates in the total inmate population volunteered to participate in the screening assessment.

¹⁰ Two additional tools were included in the battery in order to tap into the inmate's assessed level of treatment receptivity—The Stages of Change and Treatment Eagerness Scale were used (the alcohol and the drug versions).

b. Representative Sample

The research team is confident that the final sample of 1103 inmate records is a representative sample of the entire population of inmates in the Maine DOC for the following reasons. First, a sample size of close to 70% of the entire population is extremely high by any standard of sampling. Second, there is no reason to believe that the inmates who refused to do the screening altogether had any more or less severe substance abuse problems than those who did complete the screening. The most significant factor that likely influenced participation in the screening was the inmate's knowledge that their assessment results could lead to their transfer to the recently implemented Therapeutic Community.¹¹ Third, there is no reason to suspect any systematic bias that led to some cases having missing data in the database. Thus, it is reasonable to presume that this problem was a random one (i.e., not associated with any variable of interest in the analysis).

c. Criteria for Risk/Need Level Assignment

In order for the screening and assessment process to function in a cost-effective manner, criteria were established to enable assignment of inmates to risk/need levels and corresponding treatment intensity levels. These criteria are designed to be:

- Reflective of the actual state of affairs in the Maine prison population.
- Self-adjusting as the nature of substance abuse problems within the Maine prison population changes.
- Self-adjusting based on treatment outcomes.

The basic rationale for establishing criteria has to do with relative risk/need. In assessing any sub-group of individuals using instruments normed on a "general" group (i.e., individuals with a range of substance use problems) one concern is always establishing cut points that reflect the needs within the specific sub-group of interest.

It is well known that criminal justice populations have an over-representation of substance users compared with the overall population on which most substance abuse assessment instruments are normed. For this reason, the researchers have tailored the calculation of the overall severity scores to the characteristics that are found in the Maine inmate population.

The research team decided to establish criteria for level assignment based on a combination of scores made comparable by mathematical conversion to standard (Z) scores. The algorithm designed utilizes a combination of results on measures of physical dependence on substances (the inmate's highest score on either the alcohol or drug dependence measures being the score used) combined with results on a measure of substance use consequences related to that substance. The Standard Score approach also has the advantage of incorporating scores of both physical dependence and negative consequences in order to best reflect the risk, need, responsivity principle outlined earlier.

¹¹ Inmates were instructed that their assessment results would be used to determine a transfer to MCC to participate in the Therapeutic Community.

The Standard Score method is one that is widely used to categorize groups within a population. It provides a representative picture of the specific group (i.e., Maine inmates) by relating all scores on each measure to the average score on that measure for the group. It is thus possible to delimit various groupings, as the researchers have, that represent, within the population of interest, various levels of severity.

It should be noted that the risk/need algorithm adopted for this project is also self-adjusting. As data are gathered on both new inmates and outcomes, the algorithm's cut-off levels can be adjusted to bring level assignments into line with both treatment outcomes and available resources.

5. Findings

The completed screening information was entered in a statistical database to calculate scores on the overall level of severity for each of the 1103 inmates. To calculate the overall severity level, the results of four tests were used: SDS, SADD, MAST, and the DAST. Inmate's scores on each test were converted to a standard (Z) score, based on the grand sample means and standard deviations. This allows for each inmate's individual score to be expressed in terms of its relative position in the frequency distribution of the overall sample of inmates. So for example, an inmate might have a standardized DAST score of one standard deviation higher than the mean. An algorithm was developed and used to calculate an overall score or substance abuse severity level on each inmate.

The distribution of the five severity levels for the total inmate population is presented in Figure 2, including a listing of the designated assignment to the appropriate program level. Figure 2 reveals specific categories of severity (none, low, moderate, substantial, severe) that correspond to a single treatment level. For example, severe inmates would all be referred to the highest intensity level of programming, Level V. At least as an initial step, inmates should only be referred to a program level that directly corresponds to their severity level.

Figure 2 shows that there is a high percentage of substance abuse problems among the inmates in the sample (94.6). At the same time, approximately 40% of the inmate population falls into the two lowest levels on the severity rating scales (i.e., none and low). The none and low categories make up 44.3% of the inmate population indicating a requirement for Level I and II programming. Level I and II programming targets changes to the inmate's knowledge, attitudes and beliefs and is largely an awareness or educational initiative. The remaining percentage of inmates (55.7%) have severity levels that require some level of formal treatment in order to address their substance abusing and criminal behaviors. Figure 2 presents the exact breakdown of the overall percentage of inmates that require treatment at levels III to V.

Figure 2:

Severity Levels for the Maine Inmate Population N=1103		
Severity	Percentage	Program Level
None	5.3 %	Level I
Low	39.0%	Level II
Moderate	21.8%	Level III
Substantial ¹²	25.3%	Level IV
Severe	8.7%	Level V

The distribution of the five severity levels for the total women inmate population is presented in Figure 3, including a listing of the designated assignment to the appropriate program level. A comparison between the two inmate groups reveals that the women have more severe patterns of substance abuse when compared with the men. For example, 60.4% of women inmates fall into the two highest categories of substance abuse severity when compared with a figure of 34.4% for the male inmates at the two highest categories. It should be noted, however, that the size of the female inmate population is much smaller than the male inmate population. Nevertheless, a quick review of Figure 3 shows that close to 73.6% of women require the higher level of program intervention (from levels III to V).

¹² Note: The Level IV category is separated between inmates assessed as severe on alcohol alone (7.0%) and the remaining substantial inmates (18.3%). This separation will be discussed in the Five Inside Levels section of the report.

Figure 3:

Severity Levels for the Maine Female Inmate Population N=53		
Severity	Percentage	Treatment Level
None	3.8 %	Level I
Low	22.6%	Level II
Moderate	13.2%	Level III
Substantial	43.4%	Level IV
Severe	17.0%	Level V

6. Links Between Screening Assessment and Comprehensive Assessment Determination of Treatment Placement Level

The overall assessment process consists of the initial screening assessment followed by a comprehensive assessment. The steps involved in the screening assessment have already been detailed. The purpose of the comprehensive assessment is to collect additional information on the inmate's substance abuse patterns, cognitive and behavioral coping skills and to explore the relationship between the inmate's substance abuse and criminal behavior. The comprehensive assessment gives the program specialist the opportunity to establish a therapeutic rapport with the inmate and to enhance motivation prior to program delivery. The program specialist is better equipped to handle group dynamics on the first day of delivery if they have a comprehensive profile of each inmate's substance abusing and criminal history. Finally, the comprehensive assessment allows the program specialist to correct any incorrect treatment level placements that have occurred as a result of the inmate's failure to complete the screening battery accurately.

The comprehensive assessment is conducted on a "face-to-face" basis between the program specialist and the inmate. Five separate comprehensive assessment protocols are designed at each level of programming so that the assessments are tailored to the specific targets of each program. The comprehensive assessments typically include an in-person semi-structured interview with the offender after which the program specialist completes a series of ratings to determine whether or not the inmate is a good candidate for the particular intervention. In addition, the program specialist is responsible for conducting a case file review to determine the full extent of the substance abuse and crime relationship.

III. Treatment Intensity

A. Continuum of Care

The continuum of care refers to the entire range of assessment and programming services that are available to inmates serving sentences with the Maine DOC. The DSAT system includes a systematic set of procedures that begins when the inmate arrives at intake. The following steps apply to the DSAT system:

- 1) Front end screening for all inmates entering the Maine DOC at intake;
- 2) Referral to an appropriate level of programming (i.e., levels I to V);
- 3) A comprehensive face-to-face assessment prior to program entry;
- 4) Brief group motivational counseling sessions for designated inmates;
- 5) Attendance in an appropriate level of programming (i.e., levels I to V);
- 6) Pre-release transitional treatment for levels IV & V; and
- 7) Community aftercare through regional provider networks.

Research shows that self-efficacy is enhanced by providing a continuum of care that bridges institutional and community programming (with strong aftercare services offered in the community). Once released, offenders have a variety of immediate needs (housing, employment, etc.) that often take precedence over making the necessary linkages with substance abuse treatment aftercare. The extent to which treatment programs provide assistance in making the connection with aftercare directly contributes to long-term efficacy.

Treatment intensity has been defined in various ways by researchers to include duration of treatment, frequency of sessions, and time spent each day in treatment. It is clear that, over time, longer contacts are associated with improved treatment outcomes (Simpson and Brown, 1997). This consistent research finding is often translated into prolonged daily contact, however, there is little or no research supporting this translation. Rather, the length of time an individual remains in touch with a caring, supportive and effective treatment provider, whether or not the individual is attending daily sessions, appears to be the critical variable in this regard.

The Maine DSAT Model includes an active institution-to-community bridging component that links offenders with providers in the community who have been trained in the specific treatment modalities used in institutional treatment programs. The DSAT Model actively links offenders with these community providers who can then tailor aftercare programs to the specific needs of the offender and continue to reinforce skills the offender has learned in the institutional program.

The timing of the delivery of the levels I-V programming included in the DSAT model is dependent on the needs of the offender and sentence length. The level I program will be designed as a reception program for inmates classified as having “no problem” and will be delivered at the beginning of the inmate’s sentence. Levels II-IV will be delivered as a pre-release option for all inmates who are approaching release dates that coincides with the delivery of the appropriate level of treatment (i.e., levels II-IV). Long term version of levels II-IV will be designed for inmates serving long term sentences who are in need of a treatment service (based on the findings from the assessment reports). The level V “Enhanced Cognitive Behavioral (ECB)” program will be designed according to the same time frames as the Therapeutic

Community and the delivery of the ECB will match the delivery time of the Therapeutic Community.

The precise nature of aftercare programs in the community varies depending on the offender's level of need and risk, the program the offender completed while in the institution and the availability of treatment in the community. For offenders who attend Level IV and V programs in the institution, a community relapse prevention program is offered to offenders over a six-month period.

The community relapse prevention program matches the cognitive-behavioral orientation of the institutional programs (i.e., focusing on the offender's criminal thinking and behavior). The community program consists of an intensive and maintenance phase. During the initial three-week intensive phase offenders have the opportunity to continue to learn and practice skills that help them cope with high-risk situations. Core skills covered in the curriculum include decisional balance, goal setting, problem solving, relapse prevention and management, stress management, leisure skills, job refresher skills, assertiveness skills, communication skills, and other broad-based coping skills. After the intensive phase, the maintenance phase teaches offenders how to use a wide range of coping skills that are tailored to the needs of offenders in the community.

The community program is particularly helpful for offenders who graduated from Level IV and V inside the institution because of the skill reinforcement. In addition, the community program helps offenders to link with support groups in the community such as Alcoholics Anonymous (AA), Narcotics Anonymous (NA), or SMART (a cognitive-behavioral support group, with chapters in Maine, that directly parallels the cognitive-behavioral treatment programs of levels III to V of the DSAT). Community providers will require training in and familiarity with cognitive-behavioral treatment approaches in order to effectively deliver aftercare services. The goal of all aftercare services in the community is to meet the offender's treatment needs in the most cost-effective and individualized manner possible.

B. Motivational Enhancement Therapy

A critical component of treatment effectiveness is the extent to which clients are motivated to make and maintain changes in their substance use behavior as well as ancillary behaviors that may contribute to substance use (in traditional 12-step language changing "people, places and things"). A substantial body of research on motivation that has been done since the early 1980s clearly shows that substance users who receive a systematic motivational enhancement procedure at the onset of treatment demonstrate several benefits. For example, individuals more readily engage in the treatment tasks, remain in treatment longer, and thus experience better treatment outcomes (Brown and Miller, 1992).

It appears that motivational enhancement procedures facilitate treatment most in individuals who are cognitively not yet ready to change their substance use or who are ambivalent about change (individuals who are in what have been termed the Precontemplation or Contemplation stages of change by Prochaska, DiClemente and Norcross, 1992). However, motivational enhancement procedures also appear to enhance treatment engagement and change motivation in individuals who have already made a firm commitment to change (Miller, 1998, personal communication). It thus appears that a general motivational enhancement procedure with all persons entering treatment is likely to enhance treatment participation and outcomes.

The Maine DSAT will provide, as an essential component of treatment, a targeted motivational enhancement intervention as the initial intervention in treatment for inmates assigned to the Level II to V interventions. The motivational enhancement procedures will be specific to each level, with the interventions delivered to inmates at levels IV and V focusing on treatment engagement motivation and reinforcing reasons to change using the motivational interviewing approach developed by Miller and Rollnick (1993).

For inmates at levels IV and V, the motivational intervention will consist of three to six group sessions as well as one to two individual sessions with a trained counselor. The goal is to facilitate treatment engagement and foster retention to program completion. For inmates at Level III the motivational intervention will consist of one to three group sessions plus an individual session with a trained counselor. For inmates at Level II, the motivational intervention will be integrated into the first two sessions of the overall intervention.

In addition to the initial motivational interventions, further motivational sessions will be provided to inmates in Level IV and V treatments to reduce risk of program drop out or termination prior to completion of the full treatment program. These interventions will be delivered on an as needed basis should inmate program performance begin to decline.

The DSAT motivational intervention will focus on the following outline:

- 1) A decisional balance (objective consideration of the “pros” and “cons” of changing substance use versus. remaining as before);
- 2) Objective feedback of personal data regarding substance use and its attendant risks and benefits to the individual; and,
- 3) A clear outline of the program the inmate will enter following the motivational intervention.

This outline will take the form of an “informed consent” procedure in which the inmate will learn what is expected from him/her in the program and what the program will deliver in return.

C. Motivational Enhancement Therapy and Offender Characteristics

1. Motivational Enhancement Therapy

The term Motivational Enhancement Therapy (MET) is based on the principles of motivational Interviewing (MI) that was originally developed by Dr. William Miller at the University of New Mexico. The MET approach is designed to mobilize the client’s own resources in order to produce rapid, internally motivated change (Miller et al., 1992). MET is best described as a brief treatment approach (running from two to four sessions in length) that is used to treat individuals with addictive behaviors. The approach is based on several decades of clinical research on motivation and the stages of change model (Miller, 1991). The goal of MET is to increase problem recognition and the probability of treatment entry, continuation, and compliance (Miller, 1993).

2. Offenders Requiring MET

The group MET sessions target the entire inmate population who are assessed as having a substance abuse problem (i.e., ranging from low to severe) and have been referred to enter into program levels ranging from II to V. These individuals will receive group and individual motivational enhancements (or only group MET for those referred to enter into a Level II program). The objective of the group MET is to increase treatment readiness for those assessed at the early stages of motivation. The objective of including inmates at the later stages of motivation is to reinforce their commitment to participate in treatment. As well, there is the possibility that the later stage inmates will assist in motivating the early stage inmates.

The strategy of targeting inmate's at the early and latter stages of change (motivation) is consistent with the current approach to MET delivery services. The individual MET sessions are designed to reduce treatment drop out and termination during the delivery process.

D. Five “Inside” Levels

1. Defining Program Intensity

The five levels of institutional programming for substance abuse form a central component of the Maine DSAT Model. The previous section detailed the protocols that are used during the assessment phase to direct inmates into the structured correctional interventions. There is a clear linkage between inmate assessment and correctional programming with the main goal being the accurate assessment of need/risk in order to assign offenders to corresponding levels of substance abuse programming (i.e., ranging from levels I to V).

Before describing the components of the five separate correctional interventions, it is necessary to define what is meant by program intensity in the context of effective correctional treatment. As noted earlier, treatment intensity has been defined in various ways by clinicians and researchers to include duration of treatment, frequency of sessions, and time spent each day in treatment. Traditional views of program intensity often concentrate on “length of treatment” as the basis for determining the strength of a given intervention. There is no doubt that length of programming is a key component of intensity but several other factors require closer consideration.

A number of key issues move beyond “length of treatment” in relation to a definition of program intensity. The literature review (Appendix B) demonstrated that the cognitive-behavioral model is the most effective conceptual approach to use with offenders across a range of criminogenic areas (e.g., sex offending, anger and aggression, family violence, cognitive deficits), including substance abuse. There is also evidence that certain types of treatment techniques are more effective when dealing with the substance abusing offender (e.g., problem solving, assertiveness training, cognitive and behavioral coping, and relapse prevention). In addition, the work of Dr. William Miller has shown that the nature of the therapist-client relationship is a major factor that can lead to positive treatment outcomes (e.g., reductions in substance abuse and recidivism). All of these elements are consistent with a comprehensive definition of program intensity that is linked to positive treatment outcomes.

2. Standards and Guidelines for the Five Levels

This section outlines the core components that must be included with the five levels of differential treatment in order to maintain quality assurance and to target program effectiveness. It should be noted that a higher standards and guidelines apply to the programs as one moves from levels I to V.

a. Cognitive-Behavioral Model

The literature review outlines the philosophy and principles underlying the cognitive behavioral model (refer to Appendix B). According to this theory, people learn how to use substances as a result of modeling others and through personal experience. The term social learning is also used to refer to treatment approaches that target individual's thinking and behavior patterns. The cognitive-behavioral model moves beyond the genetic and biological determinants of addictions (i.e., as presented in the disease model). It explains dependence according to several inter-related variables including social factors, environmental factors, and psychological factors (such as the individual's past learning history). This multifaceted view of addiction is consistent with the characteristics of effective correctional treatment that researchers have explored in recent years (Andrews and Bonta, 1992).

The cognitive-behavioral model makes use of principles that originated with learning theory, and social and experimental psychology (including classical conditioning, operant conditioning, and social modeling). These principles help to explain how an individual learns a maladaptive behavior, such as alcohol and other drug dependence.

This theory is communicated to inmates on a concrete level and in a simple manner. For example, the model explores how "consequences" have a major impact on the inmate's substance use/abuse. This approach focuses on how the immediate effects of the substance use shape the inmate's behavior. More specifically, the inmate expectation and initial use of substances are designed to increase positive rewards in their environment and to decrease negative consequences. The scientific term for this phenomenon is positive and negative reinforcement. Several examples can be used to illustrate how positive reinforcement (e.g., acceptance, increased sociability, and relaxation) and negative reinforcement (e.g., reductions in shyness, stress, and anxiety) impact on an inmate's substance use behavior.

Researchers and clinicians have also found that antecedents (e.g., people, places, times, events) act as "triggers" that lead individuals to the initial use of a substance. The five most common high-risk situations associated with a relapse include: negative emotional states, social pressure, inter-personal conflict, positive emotional states, and cravings (Marlatt and Gordon, 1985). Once an inmate is aware of their high-risk situations, they are taught coping strategies so they can learn to either avoid or directly deal with risky situations (e.g., the use of drink/drug refusal skills to deal with peer pressure to use).

The theory that behavior is learned has direct implications for treating inmates. The model suggests that individuals are responsible for changing their own behavior. A treatment approach that targets offender motivation while at the same time teaching cognitive and behavioral coping skills enables inmates to take control of their maladaptive behaviors (through relapse prevention and management planning) in favor of pro-social and anti-criminal behavior. This conceptual model recognizes that the inmate's substance abuse behavior is usually closely linked to their criminal behavior. As such, the model simultaneously targets the inmate's substance abuse and criminal behavior patterns.

With the exception of the Therapeutic Community at the Maine Correctional Center, all of the five levels of differential programming are explicitly based on a cognitive-behavioral model.

b. Core Program Components

Screening and Comprehensive Assessment: The front end screening system is administered to each inmate to assess his/her need level (i.e., substance abuse severity) as the basis for a referral to an appropriate level of programming (i.e., from Level I to V). During the next stage in the assessment procedure, the program deliverer conducts a comprehensive assessment with the inmate to ensure that the screening assessment is accurate and that the inmate is an appropriate candidate for the particular level of treatment. The components of a comprehensive assessment typically include a file review, a “face-to-face” semi-structured interview, and the final assessment of the inmate through a series of rating scales. Refer to Section II for a complete discussion on the Maine DOC’s assessment procedures.

Selection Criteria: The five levels of programming each have selection criteria (e.g., motivation level, severity level, criminal patterns, skill deficits) that are specific to the goals and objectives of each level of programming.

Evaluation Framework: Process and outcome evaluations are used to assess the functioning of the five levels of programming. A process evaluation describes the extent to which the program was implemented as planned (e.g., sequencing of skills, improvements to problem areas, and client feedback). An outcome evaluation looks at whether the program changes the inmate’s attitudes and behavior associated with reductions in substance abuse and criminal behavior, including an examination of post-release data to support this level of finding. The tools used to conduct evaluations include a review of the results from the assessment measures (e.g., psychometric results and interview rating scales); the intermediary measures (e.g., pre/post tests); and post release measures (e.g., data tracking the inmate’s release status and substance use patterns).

Knowledge, Experience, and Characteristics of Effective Program Deliverers: The DOC will produce written guidelines detailing the type of knowledge and experience required to deliver each of the five levels of programming, including the characteristics of effective program deliverers. The key characteristics of a program deliverer include above average verbal skills; awareness of group dynamics; strong inter-personal skills; social/cognitive skills; ability to deal with poorly motivated inmates; and empathetic; open-minded; and enthusiastic. It is not necessary for the treatment providers to be in recovery themselves.

Intensive Training: The personnel selected for program delivery will undergo two main training sessions prior to their certification as a recognized program deliverer. The first training event ranges in length from two to three weeks for program deliverers who are involved in treatment delivery at levels III to V. The training participants are given a comprehensive overview on how to deliver correctional substance abuse treatment (e.g., theories of addiction, effective techniques, and motivational techniques). This “hands-on” training teaches the participants how to deliver each of the sessions through interventions during the actual training period. Video feedback and role playing are introduced so that the participants have the opportunity to rehearse and practice the delivery of the program curriculum in the training environment (including training on how to perform a comprehensive assessment). Program deliverers who successfully

complete intensive training at levels III to V can automatically deliver educational programming at levels I and II.

Follow-up Training: Follow-up training is provided to program deliverers who have completed the intensive training and delivered one to two full substance abuse programs (videotaped sessions). This training is delivered over a three-to-four-day period. The follow-up training is designed to monitor and support the treatment deliverers to ensure that they are meeting an appropriate standard of delivery (e.g., delivery of manual and content, facilitation skills, and professional attributes, i.e., characteristics). These quality assurance procedures are set up to ensure that the program is delivered according to its design (i.e., program integrity).

Treatment Supervision/Certification: All program deliverers must pass a certification process to continue delivering the Maine DOC's core interventions. Certification is awarded based on the following criteria: the successful completion of the intensive and follow-up training as well as a treatment supervision component. The treatment supervision component consists of video feedback delivery of the treatment programs whereby an experienced treatment supervisor rates the program deliverers' ability to deliver the intervention. Alternatively, direct treatment supervision (e.g., face-to-face weekly supervision) can be provided although this is an expensive alternative. Certification is awarded to program deliverers who successfully complete the training and video feedback segments of the program. Brief refresher training will be provided to certified program deliverer when required.

Train the Trainer: The Maine DOC will set up procedures so that the certified program deliverers have the opportunity to take over in the role of "program trainer." The program trainers are responsible for training all future program deliverers in the Maine DOC.

Data Collection: Program deliverers are responsible for submitting all evaluation information (e.g., assessment results, intermediary measures) to an appropriate contact in the Maine DOC. Program deliverers can also assist the department collect information to track the type and volume of program delivery across the system.

Program Documentation: All components of program delivery will be documented according to written standards. This includes training manuals, train the trainer's manuals, information manuals, standards and guidelines, research protocols, and information collection procedures.

Group Size: The group size can range from eight to 10 offenders.

Intensity, Order: All Maine DOC core programs are to be delivered in their entirety and in the specific order outlined in the delivery manual for the particular program.

Duration: The components of the Maine DOC core programs will be taught in half-day sessions with no more than five sessions per week (with the exception of the Therapeutic Community).

Facilities: Delivery of the programs of the Maine DSAT requires little in the way of special facilities, however, the following must be provided in order to insure that treatment can be delivered in a therapeutic environment: (1) Private meeting rooms to accommodate 10 inmates in a comfortable treatment setting. The supplies and equipment that are required include blackboard and chalk, flipcharts and markers, audio and visual aids, and an overhead projector;

and (2) Private office for the treatment providers to use for individual sessions with inmate participants as needed.

Community Programming Guidelines: Specific protocols will be developed to orient the community treatment providers to the DSAT system of assessment and treatment. Treatment supervision/certification standards will apply to the community treatment providers.

3. Guide to Level Descriptions

The remainder of this section is a “recipe book” outlining the key ingredients required to develop and implement the five differential levels of substance abuse programming for the State of Maine DOC. All of the interventions are based on a cognitive-behavioral model with the exception of the Therapeutic Community at Level V. The fifth level includes two interventions: the Therapeutic Community (currently operational at the MCC) as well as a Enhanced Cognitive-Behavioral program (discussed later). The focus is on outlining the cognitive-behavioral interventions given that the Therapeutic Community is already operational in the department.

A series of recommendations are made concerning the development and delivery of specific treatment techniques. The treatment techniques selected are based on well-controlled research evidence that demonstrates long-term outcome effectiveness.

The main elements included with the discussion of the five levels of treatment include the length of treatment; the delivery environment; and, the use of effective treatment techniques.

All of the five levels are consistent with the standards and guidelines that were outlined in the previous section.

The cognitive-behavior programs at levels II to V include group motivational counseling sessions that range from two to six sessions (depending on program level) prior to treatment as well as two to four individual motivational counseling sessions during program delivery. In addition, a methadone maintenance treatment is provided to inmates at levels III and IV based on a clear set of selection criteria.

4. Level 1: Awareness/Education

a. Assessed Level: No problem (5.3% of the inmate population)

A very small percentage of the Maine DOC inmate population is classified as having no substance abuse problem (5.3% of the total population). Inmates with this level of substance abuse problem present a low risk for re-offending. Inmates falling into the “no problem” range will be referred to a brief education/awareness program.

b. Intervention Description

The primary objective of the program is to target the attitudes, values, and beliefs of the inmates so that their substance use remains at the no problem level. Attention is directed at exploring how alcohol and drugs have impacted on the lives of the inmates and their family and friends.

The length of the delivery of the brief education program is recommended at one week over half day sessions.

The following types of techniques and content could be addressed over the one-week period:

- Educational topics (types of drugs and effects, tolerance, dependence, abuse potential of different drugs);
- Decision making skills (e.g., cost/benefit analysis—individual, family, society);
- Treatment options at the institution;
- Alcohol and drug regulations at the institution.

5. Level II: Low Intensity Intervention

a. Assessed Level: Low severity (39% of the inmate population)

The Level II program targets inmates with a low level of substance abuse severity. Close to 40% of the Maine DOC inmate population is classified as having a low substance abuse severity level (39% of the total population). Inmates with this level of substance abuse problem present remain at a low risk for re-offending but still require a low intensity psycho-educational intervention.

b. Intervention Description

The primary objective of the program is to target the attitudes and behaviors of the inmates in order to reduce their level of substance abuse and re-offending behavior.

The delivery of this psycho-educational program is divided between an initial two week intensive phase that is followed by two or three follow-up maintenance sessions. The intensive and maintenance sessions are delivered over half-day periods in a group format.

A range of techniques can be selected from the following menu to develop the intensive phase of the program:

- Educational sessions;
- Decisional balance—cost/benefit analysis;
- Goal setting—moderating guidelines;
- Problem solving skills;
- Social skills training;
- Relapse prevention and management.

The maintenance phase of the program is devoted to reinforcing the skills taught during the intensive phase of the program and to giving the inmates an opportunity to practice the newly acquired skills in their daily institutional living (and in preparation for release).

6. Level III: Intermediate Intensity Intervention

a. Assessed Level: Moderate severity (21.8% of the inmate population)

The Level III program is classified as a treatment program because it specifically targets behavior change among the program participants. The program is designed for inmates with a moderate level of substance abuse severity. The substance abuse profile of inmates with moderate severity levels is fairly problematic, usually involving psychological dependence and in some instances physiological dependence to alcohol and/or drugs.

Just over 21% (21.8%) of the Maine DOC inmate population is classified as having a moderate substance abuse severity level. Inmates with this level of substance abuse problem have a moderate risk for re-offending and require a formal treatment intervention.

b. Intervention Description

There are two core objectives for the Level III intervention. First, in collaboration with the Maine DOC group and individual motivational counseling services, the program is designed to enhance inmates' readiness for treatment, treatment retention and self efficacy. Second, the program targets the attitudes and behaviors of the inmates in order to reduce their level of substance abuse and re-offending behavior.

Front end motivational counseling is delivered to all inmates assessed as moderate severity prior to entry into the program (refer to Section II for a full discussion).

This treatment program is delivered over two phases. The first phase is a three-week intensive component (15 sessions) that is followed by three to five follow-up maintenance sessions. The intensive and maintenance sessions are delivered over a half day period.

A range of techniques can be selected from the following menu in order to develop the intensive phase of the program:

- Decisional balance—cost/benefit analysis;
- Goal setting—moderated substance use guidelines;
- Problem solving skills;
- Relapse prevention and management;
- Social skills;
- Leisure skills;
- Stress management;
- Inter-personal problem solving;
- Assertiveness training;
- Employment skills.

The maintenance phase of the program is devoted to reinforcing the skills taught during the intensive phase of the program and to giving the inmates an opportunity to practice the newly acquired skills in their daily institutional living (and in preparation for release).

7. Level IV: Substantial Intensity Program

a. Assessed Level: Substantial alcohol severity—Alcohol only (25.3% of the inmate population)

The Level IV program is classified as a treatment program because it specifically targets behavior change among the program participants. The program is designed for inmates with a substantial level of substance abuse severity. The substance abuse profile of inmates with substantial severity levels is usually fairly problematic, usually involving psychological dependence and often involving physiological dependence to alcohol and/or drugs.

Approximately one quarter of the Maine DOC inmate population is classified as having a substantial substance abuse severity level (25.2% of the total population). Inmates with this level of substance abuse problem have a high risk for re-offending and require a formal treatment intervention.

b. Intervention Description

There are two core objectives for the Level V intervention. First, in collaboration with group and individual motivational counseling services, the program is designed to enhance inmates' readiness for treatment and treatment retention. Second, the program targets the attitudes and behaviors of the inmates in order to reduce their level of substance abuse and re-offending behavior. Special attention is directed at relapse prevention and management.

The substantial intervention differs from the moderate intervention in terms of the increased attention that is directed to the individual participants in order to enhance motivation and teach a broad range of coping skills. The program is also delivered over a longer period of time.

Front end motivational counseling is delivered to all inmates assessed as substantial severity prior to entry into the program (refer to Section II for a full discussion).

This treatment program is delivered over two phases. The initial intensive phase is delivered over a 26-week period, followed by six follow-up maintenance sessions (group format). The intensive and maintenance sessions are delivered through half-day sessions.

A range of techniques can be selected from the following menu to develop the intensive phase of the program:

- Decisional balance—cost/benefit analysis;
- Goal setting—moderated substance use guidelines;
- Problem solving skills;
- Relapse prevention and management;
- Social skills;
- Leisure skills;
- Stress management;
- Inter-personal problem solving;
- Assertiveness training;
- Employment skills;
- Relationship therapy.

The maintenance phase of the program is devoted to reinforcing the skills taught during the intensive phase of the program and to giving the inmates an opportunity to practice the newly acquired skills in their daily institutional living (and in preparation for release).

8. Level V: High Intensity

a. Assessed Level: Severe severity at Level V (8.7% of the inmate population)

There are two program options available to inmates at Level V: a Therapeutic Community and a Enhanced Cognitive Behavioral program. These programs are classified as a treatment interventions because it specifically targets behavior change among the program participants. The programs are designed for inmates with severe levels of substance abuse severity. The substance abuse profile of inmates with severe severity levels is usually highly problematic, usually involving physiological and psychological dependence to alcohol and/or drugs.

Less than 10% of the Maine DOC inmate population is classified as having a substance abuse level that is severe (8.7% of the total population). The Level V inmates are assessed as severe based on their use of drugs alone or a combination of drugs and alcohol. In addition, among the Level IV inmates (25.3% of the inmate population), 7.0% are assessed as “severe” on alcohol alone. All inmates with a severe level of substance abuse problems have a very high risk for re-offending and require a formal treatment intervention.

The Level V severe (i.e., drugs and drugs and alcohol combined) are referred to the Therapeutic Community while the Level IV severe alcohol alone are referred to the Enhanced Cognitive Behavioral program. At the stage following the inmate’s comprehensive assessment, the treatment provider offers a program overview on the two interventions and explains how the referral system is based on the inmate’s substance use background and profile. The treatment provider and inmate reach a decision on the most appropriate intervention for the inmate.¹³ The addiction literature demonstrates that individuals who are given clear information and choices about their treatment options (e.g., treatment goals) are associated with positive treatment outcome.

b. Intervention Description

There are two core objectives for the level V intervention. First, in collaboration with group and individual motivational counseling services, the program is designed to enhance inmates’ readiness for treatment and treatment retention. Second, the program targets the attitudes and behaviors of the inmates in order to reduce their level of substance abuse and re-offending behavior. Special attention is directed at relapse prevention and management.

This treatment program is delivered over several phases throughout the inmate’s incarceration. The total length of the high intensity cognitive-behavioral program is equal to the length of the therapeutic community.

Front end motivational counseling is delivered to all inmates assessed as severe prior to entry into the program (refer to Section II for a full discussion).

¹³ Although the Therapeutic Community and the Enhanced Cognitive Behavioral programs are targeted for specific types of severe inmates, flexibility can be used to guide judgements for program referrals based on the results of the overall assessment and the inmate’s treatment goals.

Inmates will participate in a pre-substance abuse treatment cognitive skills program. This program specifically targets inmate deficits, such as, self control, concrete thinking, poor inter-personal problem solving, lack of social perspective taking, anti-social values, and weak critical reasoning (refer to the Cognitive Skills Program, Correctional Service of Canada). The program can be delivered over a six-week period over three half-day sessions. This program is also delivered extensively across the United States and internationally.

The main treatment component of the initial intensive phase is delivered over a twenty-six sessions (i.e., a five-week period). The intensive phase is delivered through half-day sessions and include both group and individual formats.

A range of techniques can be selected from the following menu in order to develop the intensive phase of the program:

- Decisional balance—cost/benefit analysis;
- Goal setting—moderated substance use guidelines;
- Problem solving skills;
- Relapse prevention and management;
- Social skills;
- Leisure skills;
- Stress management;
- Inter-personal problem solving;
- Assertiveness training;
- Employment skills;
- Relationship therapy.

The maintenance phase of the program is devoted to reinforcing the skills taught during the intensive phase and to giving the inmates an opportunity to practice the newly acquired skills in their daily institutional living (and in preparation for release). This phase is delivered through weekly half-day sessions over a six-week period.

Overall length: Front End Group Motivational (one week); Cognitive Skills (six weeks); Substance Abuse Treatment (six weeks); Maintenance (one week total). Total length: 14 weeks of treatment.

E. Facilitation of Support Group Affiliation

1. Benefits of Support Groups

Research in treatment of substance abuse clearly demonstrates that the degree to which substance abusers are able to re-design their environments to support recovery correlates highly with long-term success. That an environment supportive of recovery is crucial to outcome has been recognized for some time, and is addressed in various ways by both support groups and treatments. Thus, 12-step support groups and treatments based on 12-step philosophies urge clients to change “people, places and things.” More scientifically based approaches to recovery maintenance, such as Marlatt’s relapse prevention model, attempt to promote significant lifestyle changes, including a shift in social outlets from ones that encourage or support substance use to ones that are incompatible with substance use.

One of the primary mechanisms available to substance abusers that are attempting to maintain recovery is attendance at support groups in addition to treatment and aftercare activities. The most widely available support groups are ones based on the 12-step philosophy of Alcoholics Anonymous, i.e., Alcoholics Anonymous (AA), Narcotics Anonymous (NA), Cocaine Anonymous (CA), among others. However, research indicates that not all substance abusers are able or willing to affiliate with 12-step groups. In addition, a number of other groups have arisen over the past decade to provide alternatives to those substance abusers who recognize the need for formal support for their recovery, but are unable to accept 12-step philosophies such as powerlessness, or the quasi-religious nature of the 12-step movement. Alternatives such as Women for Sobriety (WFS), Secular Organization for Sobriety, SMART Recovery and Moderation Management provide alternatives to 12-step support groups that are acceptable to a wider variety of people while still promoting a substance abuse free and healthy lifestyle.

The Maine DSAT Model recognizes that all inmates are not alike with respect to their ability or willingness to accept the 12-step philosophies of powerlessness and higher power. Thus, despite the fact that 12-step support groups are the most widely available in the United States, it is important to provide alternatives to 12-step groups so inmates can sample and determine for themselves whether or not they feel comfortable with that particular group's philosophies. This "self-selection" process is crucial to successful support group affiliation, and is, in fact, a cornerstone of the 12-step approach, which was designed to be self-chosen, not imposed from the outside.

2. Required Attendance at Support Groups during Treatment

- For inmates who have not participated in support groups previously, or whose experiences with support groups has been limited to 12-step groups, the Maine DSAT incorporates a support group sampling process into the treatment programs at levels II to V. Treatments at these levels will require that the inmates complete various degrees of attendance at support groups while incarcerated and in community aftercare. For inmates who have never attended any support groups in the community, attendance of at least one meeting of a 12-step group and one meeting of an alternative group (e.g., a SMART Recovery Meeting)¹⁴ will be required to complete treatment. Inmates who have previously attended 12-step groups who are comfortable with the 12-step philosophy will be encouraged to attend meetings while incarcerated and will be assisted in re-affiliating with 12-step groups in the community. Those who are not entirely comfortable with 12-step philosophy will be required to attend at least one SMART Recovery meeting during treatment. SMART meetings will be made available on a regular basis in prisons where treatment is provided.

3. Cognitive-Behavioral Support Groups

SMART (an acronym for Self-Management and Recovery Training) has been selected as the primary alternative support group to be presented for several reasons:

- It is one of the largest and most widely available alternatives to 12-step groups with more than 250 meetings nationwide;

¹⁴ An example is SMART Recovery, a more structured support group based on cognitive-behavioral therapeutic principles that has groups in operation in Maine

It is based on sound scientific principles of cognitive-behavior therapy that have been shown effective in treating substance abusers; It is consistent with much of the formal treatment programming to be provided in the Maine DSAT;

- SMART has made a strong commitment to provision of service in correctional settings and is active in those settings nationwide;
- It is active in the State of Maine.

Integrated into the treatment curriculum of levels II to V will be a module(s) that reviews support group options available to inmates and addresses the pros and cons of support group affiliation. It should be noted that nothing precludes an inmate from choosing to affiliate with more than one support group, although there are some philosophical incompatibilities among the groups. There will also be some inmates who will choose to not affiliate with support groups. That choice will be honored as it is clear that enforced attendance at support groups is often counter-productive for recovery.

F. Community Programming: Transitional Services from Institution to Community

Aftercare has long been known to be a critical component of an effective substance abuse treatment system. This is particularly true when substance abusers are making the transition from a controlled setting where temptations to use substances are relatively few or substances are not readily available (i.e., an in-patient treatment program or prison) to the community where restrictions are relaxed and substances are much more readily available. Provision of effective transitional and aftercare services to assist in coping with the stress of release from prison, and the accompanying dual stigma of being a former prisoner and a substance abuser, is critical to long-term success in the community.

Further, research suggests that transitional and aftercare services are most effective when seamlessly integrated with preceding treatments both in theoretical treatment orientation and content.

The main challenge facing offenders in treatment inside institutions is learning new coping skills and planning for their use upon release. Once released offenders face the often more difficult, challenge of reinforcing and maintaining those new skills through their implementation in “real world” situations, or in other words relapse prevention. It is well known that inmates face a wide range of high-risk situations when they are released from prison (e.g., securing employment and shelter, conflict with family and friends, negative emotional states, pressure from anti-social peer associates, and cravings) that must be properly handled to avoid re-offending. Transitional services and aftercare provide the support necessary for accomplishing those tasks.

The Maine DSAT Model contains a specific mechanism for implementing an effective, seamless transition in services from institution to community aftercare that enhances the likelihood that inmates will engage in effective relapse prevention strategies upon release, and thereby reduce their likelihood of criminal recidivism. The transitional services in the Maine DSAT are characterized by the following:

- Continuation of institutional cognitive-behavioral programming in pre-release centers with at least weekly sessions as long as the inmate is in pre-release status.

- Initial contact and several treatment sessions with community treatment providers two to three weeks prior to formal release. At this stage, the community provider takes over treatment from the Maine DOC treatment provider. This helps to quickly establish a rapport as well as aid in the planning for seamless transition from prison-based to community treatment. Thus, an inmate will leave the prison with an appointment to see his/her community treatment provider within two to three days of release.
- Use of cognitive-behavioral relapse prevention procedures based on the model developed by Marlatt and Gordon (1985) that can be modified, if necessary, to incorporate 12-step or other support group services. The use of a cognitive-behavioral program enhances transition by using terminology and concepts, and building upon behavioral techniques with which the offender will already be familiar from treatment in the institution.
- Development of an incentive program based on community reinforcement procedures to improve treatment continuation by inmates who are released without parole or probation supervision. Although this involves some cost, such incentive systems, which typically provide non-cash vouchers exchangeable for goods and services at local retailers contingent upon attendance at treatment activities, have been shown to have a significant positive effect on outcomes with substance abusers (see Budney and Higgins, 1998 for a description of one such program for cocaine abusers).

This process will require that community providers be trained and skilled in the application of cognitive-behavioral relapse prevention strategies as well as in the use of community reinforcement techniques and facilitation of affiliation with support groups. A combination of assessed inmate need at the time of release and requirements of oversight authorities such as the probation department can determine treatment duration in the community. The key is that transition to the community be made as seamlessly and systematically as possible given the particular circumstances of a particular inmate.

IV. Special Needs Populations and Other Issues

A. Women

Although their numbers in state correctional systems are small (in Maine, women represent less than 4% of the total adult prison population) the substance abuse treatment needs of women are more pressing than those of male inmates. Thus, in the survey of Maine DOC prisoners, 80% of the women surveyed required higher levels of service, compared with only 44% of men. In addition, research indicates that women require services that differ in both content and configuration from those typically most effective with men.

The literature on substance abuse treatment outcomes for women is sparse compared with the literature on men, and there is little research on what works most effectively with incarcerated women (Henderson, 1998). Research has identified a number of need areas unique to female offenders that must be addressed through gender specific programming that is tailored to the specific problems associated with substance abuse in women. Specifically women substance abusers, compared with men, appear to

- Have suffered significantly more physical and sexual abuse;
- Have a higher incidence of co-existing psychiatric disorders;
- Often have parenting issues and/or relationship issues that impact on parenting and childcare upon release from prison.

In addition, research suggests that women substance abusers generally are not able to adequately address many of these issues in mixed gender programs. Most treatment programs for substance abuse have been designed for men. While men seem to have better outcomes from mixed gender programs, women's outcomes seem poorer from mixed gender programs than from gender specific programs. For these reasons, special programming that is delivered separately from the programming delivered to males needs to be developed for the Maine DSAT system. Specialized assessment and treatment will be implemented for women offenders in the Maine DOC to provide:

- More extensive assessment focusing on issues of physical and sexual abuse, co-occurring psychiatric disorder and parenting/relationship issues. Specific questions will be added to the comprehensive assessment interview at each treatment level for women.
- Specialized modules that specifically address issues of victimization, shame reduction, personal autonomy and relationship issues that are common among women substance abusers will be added to the treatment packages outlined in Section IV .
- Relapse prevention efforts in the community need to focus specifically on the role of abuse, depression and relationship pressures in triggering relapse in women. Most (if not all) therapeutic services to women need to be delivered by female therapists to facilitate the comfort and openness necessary to effective treatment participation.

Because the number of female inmates in the Maine DOC is small, the level system designed for male inmates may not be feasible to implement. Therefore, the initial program design for women in the Maine DSAT will focus on the most serious levels of risk/need (i.e., treatment levels IV and V). Programming developed for male inmates at those levels will be modified according to the points above to better address the needs of women in the Maine DOC.

B. Treatment of Inmates with Antisocial Personality Disorder or Psychopathy

Clinical lore about the “treatability” of individuals with Antisocial Personality Disorder (ASP) or it's rarer, and perhaps more severe, form psychopathy suggests that treatment is generally likely to fail with these individuals. This has led some researchers to suggest that these individuals not be treated at all, but be screened out of treatment programs, which can then be targeted to serve individuals more likely to benefit from them. However, research has appeared in the last decade suggesting that this broad-based pessimism is unwarranted.

Several studies (reviewed in detail in the Literature Review, Appendix B) provide evidence that cognitive-behavioral models of treatment are successful in producing significant changes in substance abusers that suffer from ASP. Certainly, data from the Correctional Service of Canada, which does not screen out persons with ASP from its treatment programs, suggest that including these individuals in treatment does not result in significant declines in positive outcomes.

Of special concern with this population is a higher than average treatment drop-out rate that needs to be addressed by specific motivational and treatment retention programming. Addressing these issues is an integral part of the Maine DSAT. This is particularly important at the higher intensity levels where the incidence of ASP is likely to be higher. Individuals with ASP are more likely to be very heavy users of substances (and thus more likely to score high on physical dependence measures) and to have experienced a broad range of negative consequences associated with substance use.

Many persons with ASP often lack ability to empathize with others and to engage in conventional problem-solving and moral reasoning. For this reason, these components should be specifically integrated into the Maine DSAT in the Level IV and V interventions (they are part of the Therapeutic Community intervention, as well, although less specifically and systematically addressed than by the cognitive-behavioral model).

C. Treatment of Dually Disordered Inmates

Substance abuse populations have a much higher incidence of co-existing psychiatric disorders than do other psychiatrically disordered populations. Epidemiological studies clearly show that an average of 35% of substance abusers suffer from at least one additional psychiatric disorder (Regier et al., 1990). The concentration of dually disordered individuals in prison settings is even higher, although no specific data are available to specify the percentages of dually disordered individuals in these settings.

The presence of a high percentage of dually disordered individuals, particularly ones with serious disorders such as major depression, bipolar disorder and various forms of schizophrenia, makes it imperative that screening, assessment and treatment of co-existing disorders be an accessible component of any substance abuse treatment program. Regular psychiatric screening and assessment need to be made available, and appropriate psychiatric treatments provided to individuals in the Maine DSAT who are suspected of having a severe mental disorder.

Although it was once thought that substance abusers with co-existing severe mental illness could not be treated through traditional treatment programs, recent research clearly suggests otherwise. When co-existing mental disorder is effectively managed through psychiatric care, substance abusers with these disorders are as able to benefit from treatment as those without.

D. Methadone Maintenance Treatment

Although controversial among individuals who advocate strongly for all substance abuse treatment aiming to help participants become completely drug free, methadone maintenance treatment (MMT) has been shown by decades of research to be the single most broadly effective treatment for opiate dependence. In a report to the Institute of Medicine of the National Academy of Sciences, Gerstein and Harwood (1990) write:

“Methadone maintenance has been the most rigorously studied modality and has yielded the most positive results for those who seek it (p. 13).”

In a research evidence based model, such as the Maine DSAT, to exclude a treatment modality with the strong evidence of efficacy that MMT has would be irresponsible.

Research clearly shows that for individuals who have failed at drug-free treatment programs, or whose dependence on opiates is substantial, one effective tool that must be part of the clinical armamentarium is MMT. Opiate dependent clients on MMT show significant reductions in criminal and other inappropriate behaviors, and significant increases in socially appropriate behaviors such as maintaining employment, spending time with families, and improving educational levels.

For these reasons, it is recommended that MMT be included in the Maine DSAT armamentarium, not as a stand-alone treatment, but as an adjunct to cognitive-behavioral programming designed to enhance the pro-social capabilities of opiate dependent offenders. MMT can be offered both during and subsequent to incarceration and should be accompanied by formal social skills and problem-solving training. MMT can be made available to the following types of opiate dependent offenders identified in the screening and comprehensive assessment:

- Offenders who have had success on MMT in the past and wish to continue on MMT;
- Offenders who have failed on one or more occasions to complete drug-free treatment or to remain drug-free following treatment, and who request a trial on MMT

Other eligibility criteria may be established, however, it is our strong recommendation that MMT be available to Maine DOC inmates as one of several treatment options.

E. Support Groups

The role of support groups in the Maine DOC has been referred to elsewhere in this report. This extremely important adjunct to treatment has often been misunderstood or misused in criminal justice settings. Specifically, there has been a tendency on the part of criminal justice agencies or the courts to mandate attendance at specific (usually 12-step based) support groups. This practice directly contradicts the components of these support groups that make them most effective. Specifically, for a support group to be effective the individual must be receptive to and choose involvement in the support group, and affiliate with it actively. This is a process that cannot be mandated, but must occur as part of the overall set of changes in cognition and behavior that occur in successful treatment.

For many individuals the philosophies associated with 12-step support groups stand in the way of effective affiliation. For many others, especially women, the notion of powerlessness can be misconstrued and reinforce already existing personal beliefs that one is not efficacious and needs to be dependent entirely on others in order to function effectively. Other substance abusers find the 12-step focus on a higher power to conflict with their religious convictions. In fact, several state jurisdictions have, in recent years, prohibited the mandating of attendance at 12-step groups because the “spiritual” focus has such a strong religious tone. The courts that have prohibited mandatory attendance at 12-step groups have done so on the basis of preservation of First Amendment rights to freedom of religion.

For these and other reasons, the researchers recommend that the Maine DSAT provide inmates in the program access to a variety of support groups. A mechanism for introducing inmates to these various support groups is outlined in Section IV. The availability of a variety of support groups

of differing philosophies and content will greatly enhance the likelihood that inmates will affiliate with at least one such group, and thus greatly enhance overall treatment outcomes.

V. Summary

The Maine Department of Corrections recognizes that substance abuse is a major criminogenic need area among their inmate population. The Maine Office of Substance Abuse has developed a Differential Substance Abuse Treatment (DSAT) model for full-scale delivery within the Maine DOC. This report has highlighted that the DSAT Model is based on correctional research and development that has been underway for the past 20 years. The assessment procedures and treatment approaches advanced in the DSAT Model are based on the characteristics of effective correctional treatment.

The Maine DOC has successfully completed a wide scale screening assessment of the offender population in recent months. As a result, the department now has valid and reliable information on the nature and extent of substance abuse severity among the entire inmate population. A clear understanding about the range of criminal need levels within the offender population serves as the basis through which reliable estimates can be generated to allocate funding to the five differential levels of programming. The Maine DOC is now in a position to proceed with the full-scale implementation of the assessment and treatment services that are presented in the DSAT model. The implementation phase can proceed with confidence given that similar treatment services have successfully been implemented in correctional jurisdictions in the United States and Canada.